

#### ABSTRACT OF THE DISCLOSURE

A head-mounted illuminator, particularly suited to surgical, medical and dental applications, includes a housing with a hollow interior having a light-receiving end and a light-projecting end. An optical fiber or fiber bundle is used to carry light from the source of light into the interior of the housing through the light-receiving end, and a

5      Fresnel lens, mounted in the light-projecting end of the housing, receives light from the optical fiber and projects the light into a field of view. The Fresnel lens is constructed from acrylic material, enabling the design to focus and concentrate visible light. In the preferred "grooves in" embodiment, the light-projecting end and the light-receiving end of the housing are connected with a threaded coupling, enabling the light-projecting end

10     to be moved forward and backward relative to the light-receiving end to adjust the light projected into the field of view. The light-projecting end of the housing is also preferably conical in shape, and terminates with a diameter larger than that of the light-receiving end. The head-mounted illuminator further includes a mechanism for mounting the housing to a wearer's head, preferably a mechanism for pivotally mounting.